FULL LIST OF PUBLICATIONS
(JANUARY 2011)

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I. BOOKS, EDITED BOOKS & THESES


II. REFEREED JOURNAL ARTICLES & CHAPTERS IN BOOKS

Journal articles:
42. Gardner JW, Hines EL and Dowson C 2005 Ingenia, 18738, 38-39 “Smelling illness”


73. Hatfield JV, Covington JA and Gardner JW 2000 Sensors and Actuators B 65 253-256 “GasFETs incorporating conducting polymers as gate materials”


82. Ingleby P, Gardner JW and Bartlett PN 1999 Sensors and Actuators B 57 17-27 “Effect of micro-electrode geometry on response of thin-film poly(pyrrole) and poly(aniline) chemoresistive sensors”


Full List of Publications – Professor Julian Gardner

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Articles/chapters in books:

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183. Gardner JW and Hines EL 1996 in Handbook of Biosensors: Medicine, Food & the Environment (ed. E. Kress-Rogers) "Pattern analysis techniques" Ch. 27 pp633-652


188. Hines EL, Gianna CC and Gardner JW 1993 Neural Networks: Techniques & Applications eds. PJ Lisboa and MJ Taylor (Ellis Horwood) Ch. 8 "Neural network based electronic nose using constructive algorithms”


**III. PATENTS**


**IV. KEYNOTE, INVITED & CONFERENCE PAPERS**


287. **Invited speaker:** *Gardner JW*, Seminario Sensores Inteligentes para a deteccao e separacao de rolhas com aromas estranhos, Portugal, Sept 23 2004 “Application of smart sensors in the cork industry”


305. **Government report**: A Strategic Framework for 2015, Foresight Publication, DTI, March 2002. DTI Pub 6030/3k/03/02/NP. URN 02/808


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<td>322.</td>
<td>Gardner JW Advances in Sensor Technologies Symposium, Warwick University, February 2001 “Advances in Microsensors and MEMS”</td>
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<td>326.</td>
<td>Invited paper: Varadan VK and Gardner JW 8th Annual International Symposium on Smart Structures and Materials: Smart Electronics and MEMS, 4-8 March, Newport Beach, California, USA, SPIE code no.4334-48, (2001). “Smart tongue for monitoring the freshness of orange juice and milk”</td>
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<td>328.</td>
<td>Gardner JW, Covington JA, Udrea F, Dogaru T, Lu C-C and Milne W Technical Digest of Transducers 01, Munich, 10-14 June 2001 “SOI-based micro-hotplate microcalorimeter gas sensor with integrated BiCMOS transducer”</td>
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<td>329.</td>
<td>Keynote paper: Gardner JW and Cole MV 5th Int. Conf. on Breath Odor, Tokyo, 1-2 July 2001 “Medical applications of electronic nose technology”</td>
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335. Covington JA, **Gardner JW** and Briand D *8th Int. Conf. on Chemical Sensors, Basel, Switzerland, 3-5 July, 2000* “A polymer gate FET sensor array for detecting organic vapours”


343. Cole M, **Gardner JW**, Brignell JE and Bartlett PN *6th Joint Warwick-Tokyo Nanotechnology Symposium, Coventry, UK, 18-21 September 2000* “Characterisation of a poly(pyrrrole) and poly(bithiophene) five element CMOS-compatible active bridge devices”


345. Invited paper: Varadan VK and **Gardner JW** *Proc. SPIE on Smart Electronics and MEMS, Newport Beach, USA, March 1999* “Smart tongues and smart noses”

346. **Gardner JW**, Covington JC and Hatfield JV *Proc. SPIE on Smart Electronics and MEMS, Newport Beach, USA, March 1999* “Conducting polymer FET devices for vapour sensing”


348. Setiadi D, Udrea F, Milne WI, Covington J and **Gardner JW** *SPIE Meeting, USA, 1999* “3D numerical simulation of novel SOI MOSFET based gas sensors”


356. Hatfield J, Covington JA and Gardner JW Proc. of Int. Conf. on Chemical Sensors, Beijing, June, 1998 “GasFETs incorporating conducting polymers as gate materials”


358. Invited talk: Gardner JW South East Midlands branch of Institution of Agricultural Engineers, Silsoe, 3 March 1997 “Electronic noses: fabrication and application”


365. Shin H W and Gardner J W Proc. of 3rd East Asian Conf. on Chemical Sensors, Seoul, Korea, 5-6 November 1997 “A combined resistive and calorimetric gas sensor”


372. Chetwynd DG and Gardner JW IEE Colloquium on Conducting Polymers and their applications in transducers and instrumentation, Digest No. 96/242, 30 October 1996 “Tribological applications of conducting polymer films in micromechanical devices”
373. Dyer DC and Gardner JW IEE Colloquium on Conducting Polymers and their applications in transducers and instrumentation, Digest No. 96/242, 30 October 1996 “Interface electronics for resistive and piezoelectric polymer gas sensors”


| 397. | Fekadu A A, Hines E L and **Gardner J W** 1993 *Int. Conf. on Neural Nets & Genetic Algorithms, Innsbruck, Austria, April* 1993 “Neural tree network based electronic nose” |
| 398. | Fekadu A A, Hines E L and **Gardner J W** 1993 *Int. Conf. on Neural Nets & Genetic Algorithms, Innsbruck, Austria, April* 1993 “Genetic algorithm design of neural net based electronic nose” |
| 401. | **Gardner J W** 1993 *Sensors for Laboratory and On-line Analysis, Manchester, UK*, 28-29 April 1993 “Tin oxide and polymer semiconductor sensor systems for laboratory or on-line gas and odour detection” |
| 403. | **Gardner J W** 1993 *Focus on Micromechanics, IOP Meeting, University of Warwick, UK*, 8-9 June 1993 “Micromachining of integrated gas microsensor systems” |
| 405. | Herwaarden A W, Sarro P M, **Gardner J W** and Bataillard P 1993 *Technical Digest of Transducers ’93, Yokohama, Japan*, June 1993 “Microcalorimeters for (bio)chemical measurements in gases and liquids” |
| 406. | Tan T T, **Gardner J W**, Farrington J F and Bartlett P N 1993 *EPMS ’93, Sheffield, August* 1993 “Current-voltage characteristics of evaporated and electroplated metal polypyrrole junctions” |


434. Gardner J W 1991 European workshop on Pyrolysis Mass Spectrometry, Biosensors and Data Analysis Portugal, 16-20 September "Data processing and pattern recognition techniques in odour sensing"


442. Gardner J W 1990 2nd Biennial Tokyo-Warwick Seminar, University of Warwick, September "Potential applications of electropolymerised thin organic films in nanotechnology"

443. Gardner J W 1990 Proceedings of SERC Advanced Vacation School, University of Warwick, September 16-21 "Recent advances in solid-state microsensors"

444. Shurmer H V, Corcoran P, Gardner J W 1990 Eurosensors IV Conference, Karlsruhe, October 1-3 "Integrated arrays of gas sensors using conducting polymers with molecular sieves"


446. Gardner J W 1989 Molecular Electronics Workshop, University of Bangor, April "I-V characteristics of gold/poly-N-methylpyrrole junctions"

447. Gardner J W 1989 8th Meeting of Chemical Sensors Club, HSE Laboratory, Sheffield, April "Integrated sensor arrays in the Warwick electronic nose"

448. Gardner J W and Bryanston-Cross P J 1989 Microengineering Report 77, University of Warwick "Automated feature extraction from surfaces and interferograms by optical techniques"

449. Gardner J W and Bartlett P N 1989 Microengineering Report 82, University of Warwick "Chemical sensing using a multisensor array and pattern recognition"

450. Gardner and Tan T T 1989 Conf. on Solid State Physics, University of Warwick, December "Current Voltage characteristics of metal-conjugated polymer heterocontacts"

451. Gardner 1988 Eurosensors II Conf., University of Twente, November "Electrical characteristics of semiconductor gas sensors"

452. Shurmer H V, Gardner J W and Dalby D 1988 Eurosensors II Conf., University of Twente, November "Pattern recognition for gas sensor arrays"


454. Gardner J W, Dalby D and Shurmer H V 1988 Microengineering Report 68, University of Warwick "Results of feasibility study on detection of oil leaks from underground cables"


456. Bryanston-Cross P J, Andonov D A and Gardner J W 1987 FASTIG Colloquium, University of Loughborough, November "Interferometric fringe processing applied to a 1000 C combustion flame"


461. **Gardner J W** and Phillips D W 1984 *FREC/P 2*, February "Primary vessel perforation due to inner skirt impact"


463. **Gardner J W** et al 1984 *NNC Report PWR R907*, July "CTFT analysis of fire effects on C&I/electrical equipment"


**Books Published (13):**

- *Electronic Noses & Sensors for the Detection of Explosives*
- *Microsensors: Principles and Applications*
- *Microsensors, MEMS, and Smart Devices*
- *Handbook of Machine Olfaction*
- *Sensors and Sensory Systems for an Electronic Nose*
Foreign translations (4):

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